

# Christian Broadcasting Network Improves Backups and Disaster Recovery with ExaGrid

## Customer Overview

The Christian Broadcasting Network (CBN) is one of the largest Christian television ministries in the world. CBN's flagship program, The 700 Club, is a live television program that airs weekdays before a studio audience from The Christian Broadcasting Network's (CBN) broadcast facilities in Virginia Beach, Virginia. On the air continuously since 1966, it is one of the longest-running programs in broadcast history. Hosted by Pat Robertson, Terry Meeuwsen, Gordon Robertson, and Kristi Watt with news anchor Lee Webb. CBN WorldReach broadcasts have been viewed in more than 70 foreign languages, can be seen in more than 200 countries, and are accessible throughout the year by more than 1.5 billion people around the world. CBN is based in Virginia Beach, Virginia.

## Disaster Recovery Concerns Led to Search for a New Solution

The Christian Broadcast Network (CBN) operates a main datacenter at its headquarters facility in Virginia Beach, Virginia and a call center and disaster recovery site in Nashville, Tennessee. CBN's IT staff had been backing up data to tape each night but long backup times and concerns about the organization's ability to quickly recover from a disaster led to a search for a new solution.

"We needed to ensure that we could recover from a disaster as quickly as humanly possible, and that wasn't going to happen with tape," said Mike Hoke, network engineer at the Christian Broadcasting Network.

Each night, CBN's IT staff backed up data from its 250 servers to tape and the tapes were sent weekly to a nearby Iron Mountain facility for safekeeping. Catalog tapes were also sent via next day air to the Nashville disaster recovery site. In the event of a disaster, data could be fully restored within 72 hours, but the information could potentially be days old because the tapes were only sent out for storage once a week.

## Dual 15TB ExaGrid Systems Speed Backups and Improve Disaster Recovery, Data Deduplication Reduces Amount of Data Stored

CBN's IT department decided to look at different approaches to backup in hopes of improving both its backup windows and disaster recovery capabilities, and chose ExaGrid's disk-based backup system over several competing solutions.

CBN installed 15TB ExaGrid systems in both the Virginia Beach and Nashville locations. The Virginia Beach facility backs up data locally to the ExaGrid system and then replicates the data to the Nashville system in case it is needed for disaster recovery. The ExaGrid systems work along with CBN's existing

backup application, Symantec's Veritas NetBackup.

"The ExaGrid system was extremely competitive in terms of price, especially when we considered how much data we could store on the unit. We also liked ExaGrid's architecture and its post-process data deduplication. We believed that it would provide the fastest possible backups because the data is sent straight to disk and then compressed. We've been very pleased with the performance both in terms of backup speed and data deduplication," said Hoke. "In fact, we're currently storing over 50TB of data in less than 7TB of disk space."

ExaGrid combines last backup compression along with data deduplication, which stores changes from backup to backup instead of storing full file copies. This unique approach reduces the disk space required by a range of 10:1 to 50:1 or more, delivering unparalleled cost savings and performance. ExaGrid delivers extremely fast backup performance because data is written directly to disk, and data deduplication is performed post-process after the data is stored to reduce data. ExaGrid is cost effective when a two-site system is used because its data deduplication technology moves only changes between sites, minimizing the amount of bandwidth needed.

"Our backup times and the replication speed have been impressive. Our daily backups begin at 6:30 p.m. and are completed and replicated by the time we arrive in the morning," said Hoke. "We're confident that in the event of a real disaster, our data will be safe and available to our organization in a timely fashion."

CBN currently uses NetBackup as its primary backup application, but Hoke said that the IT staff is planning on improving performance even further by backing up VMware images directly to the ExaGrid system.

"With the ExaGrid systems in place, we believe that we can be up and running in our disaster recovery site with all our data restored in as little as 12 to 24 hours. That really helps us sleep at night."

Michael Hoke  
Network Engineer  
Christian Broadcasting  
Network



"We're still working on virtualizing all of our critical servers but we see a clear benefit in the fact that we will be able to back up the virtual disk files directly to the ExaGrid system and then restore entire virtual disks here in Nashville. It will make a tremendous difference in terms of ease of use, administration and performance," said Hoke. Hoke said that CBN is in the process of becoming Payment Card Industry (PCI) compliant, so backing up to disk instead of tape will improve data security. "Tapes can easily get lost or stolen, so backing up to tape isn't the most secure method of protecting data. The ExaGrid systems are in our datacenters behind our firewalls so we have a higher degree of confidence that the information is safe and secure," he said.

### Easy Scalability to Accommodate Growing Amounts of Data, Superior Customer Support

CBN recently upgraded its ExaGrid systems and added an additional 5TB of storage to accommodate more data. ExaGrid's GRID computing software makes the system highly scalable, and when plugged into a switch, different sized configurations can be mixed and matched into a single GRID system with capacities of up to a 60TB full backup plus retention. Once virtualized, they appear as a single system to the backup server, and load balancing of all data across servers is automatic.

ExaGrid comes packaged as a turnkey appliance and was designed to be easy to deploy and manage and to deliver maximum uptime with redundant, hot-swappable components. All components are fully supported by ExaGrid's trained, in-house engineers dedicated to individual accounts.

"Upgrading the ExaGrid system was easy. We installed the additional unit, configured it ourselves and then called ExaGrid's support to have them look everything over. It really was straightforward and simple to do. The ExaGrid support team is responsive and knowledgeable, and they do a terrific job at monitoring the system. We've had a very good experience with them," said Hoke.

Hoke said that since installing the ExaGrid systems, CBN's IT staff is confident that its data can be restored quickly in the event of a disaster. "With the ExaGrid systems in place, we believe that we can be up and running in our disaster recovery site with all our data restored in as little as 12 to 24 hours. That really helps us sleep at night," he said.

### ExaGrid and NetBackup

Symantec's Veritas NetBackup delivers high performance data protection that scales to protect the largest UNIX, Windows, Linux and NetWare environments. With complete protection from remote office to center to vault, NetBackup offers a single console for all backup and recovery operations. Organizations using Veritas NetBackup can look to ExaGrid as an alternative to tape for nightly backups. ExaGrid sits behind existing backup applications, such as NetBackup, providing faster and more reliable backups and restores. In a network running NetBackup, using ExaGrid in place of a tape backup system is as easy as pointing existing backup jobs at a NAS share on the ExaGrid system. Backup jobs are sent directly from the backup application to the ExaGrid for onsite backup to disk.

### Intelligent Data Protection

ExaGrid's turnkey disk-based backup system combines high quality SATA drives with byte-level data deduplication, delivering a disk-based solution that is more cost effective than standard SATA drives. ExaGrid's byte-level data deduplication technology stores only the changes from backup to backup instead of storing full file copies, reducing the amount of disk needed by a range of 10:1 to 50:1 or more, resulting in a solution that is 25 to 30% the cost of standard SATA drives. The ExaGrid system is easy to install and use and works seamlessly with popular backup applications, so organizations can retain their investment in existing applications and processes.

ExaGrid servers can be used at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories for disaster recovery.

For more information about ExaGrid, please visit our website [www.ExaGrid.com](http://www.ExaGrid.com) or call us at 1-800-868-6985.

#### ABOUT EXAGRID

ExaGrid is the leader in cost-effective disk-based backup solutions. A highly scalable system that works with existing backup applications, the ExaGrid system is ideal for companies looking to quickly eliminate the hassles of tape backup while reducing their existing backup windows. ExaGrid's innovative approach minimizes the amount of data to be stored by providing standard data compression for the most recent backups along with byte-level data deduplication technology for all previous backups. Customers can deploy ExaGrid at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories or for disaster recovery.

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